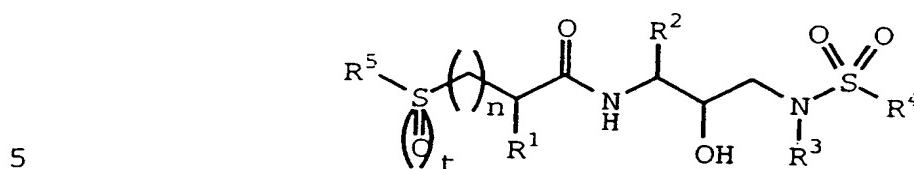


WHAT IS CLAIMED IS:

1. Compound represented by the formula:



or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein n and t each independently represent 0, 1 or 2;

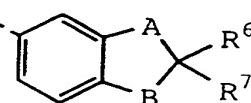
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R¹ represents hydrogen, alkyl of 1-5 carbon atoms, alkenyl of 2-5 carbon atoms, alkynyl of 2-5 carbon atoms, hydroxyalkyl of 1-3 carbon atoms, alkoxyalkyl of 1-3 alkyl and 1-3 alkoxy carbon atoms, cyanoalkyl of 1-3 alkyl carbon atoms, -CH₂CONH₂, -CH₂CH₂CONH₂, -CH₂S(O)₂NH₂, -CH₂SCH₃, -CH₂S(O)CH₃ or -CH₂S(O)₂CH₃ radicals;

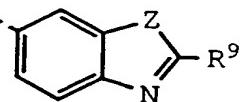
20 R² represents radicals of alkyl of 1-5 carbon atoms, aralkyl of 1-3 alkyl carbon atoms, alkylthioalkyl of 1-3 alkyl carbon atoms, arylthioalkyl of 1-3 alkyl carbon atoms or cycloalkylalkyl of 1-3 alkyl carbon atoms and 3-6 ring member carbon atoms;

25 R³ represents radicals of alkyl radical of 1-5 carbon atoms, cycloalkyl of 5-8 ring members or cycloalkylmethyl radical of 3-6 ring members;

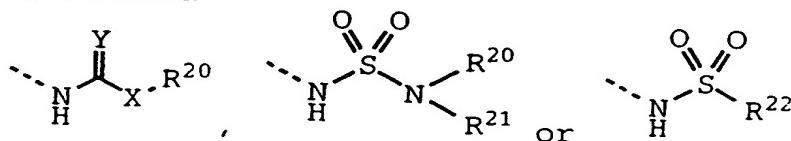
30 R⁴ represents benzo fused 5 to 6 ring member heteroaryl or benzo fused 5 to 6 ring member heterocyclo radicals, or a radical of the formula



wherein A and B each independently represent O, S, SO or SO₂; R⁶ represents deuterium, alkyl of 1-5 carbon atoms, fluoro or chloro radicals; R⁷ represents hydrogen, deuterium, methyl, fluoro or chloro radicals; or a radical of the formula



wherein Z represents O, S or NH; and R⁹ represents a radical of formula



10 wherein Y represents O, S or NH; X represents a bond, O or NR²¹;

15 R²⁰ represents hydrogen, alkyl of 1 to 5 carbon atoms, alkenyl of 2 to 5 carbon atoms, alkynyl of 2 to 5 carbon atoms, aralkyl of 1 to 5 alkyl carbon atoms, heteroaralkyl of 5 to 6 ring members and 1 to 5 alkyl carbon atoms, heterocycloalkyl of 5 to 6 ring members and 1 to 5 alkyl carbon atoms, aminoalkyl of 2 to 5 carbon atoms, N-mono-substituted or N,N-disubstituted aminoalkyl of 2 to 5
20 alkyl carbon atoms wherein said substituents are radicals of alkyl of 1 to 3 carbon atoms, aralkyl of 1 to 3 alkyl carbon atoms radicals, carboxyalkyl of 1 to 5 carbon atoms, alkoxy carbonylalkyl of 1 to 5 alkyl carbon atoms, cyanoalkyl of 1 to 5 carbon atoms or hydroxyalkyl of 2 to 5 carbon atoms;

25 R²¹ represents hydrogen radical or alkyl radical of 1 to 3 carbon atoms; or the radical of formula -NR²⁰R²¹ represents a 5 to 6 ring member heterocyclo radical; and

30 R²² represents alkyl radical of 1 to 3 carbon atoms or R²⁰R²¹N-alkyl radical of 1 to 3 alkyl carbon atoms; and

R⁵ represents an alkyl radical of 1-5 carbon atoms, alkenyl radical of 2-5 carbon atoms, alkynyl radical of 2-5 carbon atoms or aryl substituted alkyl radical of 1-5 carbon atoms.

5

2. Compound of Claim 1, or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein n represents 1;

10 t represents 1 or 2;

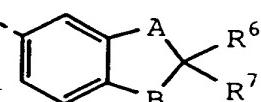
R¹ represents hydrogen radical, alkyl radical of 1-3 carbon atoms, alkenyl radical of 2-3 carbon atoms, alkynyl radical of 2-3 carbon atoms radicals or
15 cyanomethyl;

R² represents radicals of alkyl of 3-5 carbon atoms, arylmethyl, alkylthioalkyl of 1-3 alkyl carbon atoms, arylthiomethyl or cycloalkylmethyl of 5-6 ring member
20 carbon atoms radicals;

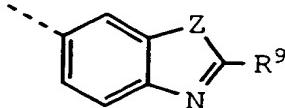
R³ represents alkyl of 1-5 carbon atoms, cycloalkylmethyl of 3-6 ring members, cyclohexyl or cycloheptyl radicals;

25 R⁴ represents 2-amino-benzothiazol-5-yl, 2-amino-benzothiazol-6-yl, benzothiazol-5-yl, benzothiazol-6-yl, benzoxazol-5-yl, 2,3-dihydrobenzofuran-5-yl, benzofuran-5-yl, 1,3-benzodioxol-5-yl or 1,4-benzodioxan-6-yl radicals; or a radical of the formula

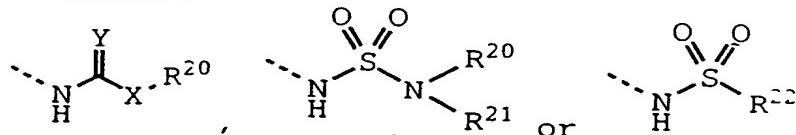
30



wherein A and B each represent O; R⁶ represents deuterium, methyl, ethyl, propyl, isopropyl or fluoro radicals; and R⁷ represents hydrogen, deuterium, methyl or fluoro radicals; or a radical of the formula



wherein Z represents O, S or NH; and R⁹ represents a radical of formula



- 5 wherein Y represents O, S or NH; X represents a bond, O or NR²¹;

- R²⁰ represents hydrogen, alkyl of 1 to 5 carbon atoms, phenylalkyl of 1 to 3 alkyl carbon atoms, heterocycloalkyl of 5 to 6 ring members and 1 to 3 alkyl carbon atoms, or N-mono-substituted or N,N-disubstituted aminoalkyl of 2 to 3 alkyl carbon atoms wherein said substituents are alkyl radicals of 1 to 3 carbon atoms; and
- 10 R²¹ represents hydrogen or methyl radicals; or the radical of formula -NR²⁰R²¹ represents pyrrolidinyl, piperidinyl, piperazinyl, 4-methylpiperazinyl, 4-benzylpiperazinyl, morpholinyl or thiamorpholinyl radicals; and
- 15 R²² represents alkyl radical of 1 to 3 carbon atoms; and
- R⁵ represents an alkyl radical of 1-5 carbon atoms, alkenyl radical of 3-4 carbon atoms, alkynyl radical of 3-4 carbon atoms or aryl substituted alkyl radical of 1-4 carbon atoms.

3. Compound of Claim 2, or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein

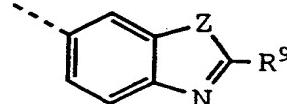
- 30 R¹ represents hydrogen, methyl, ethyl or cyanomethyl radicals;
- R² represents isobutyl, n-butyl, CH₃SCH₂CH₂-, phenylthiomethyl, (2-naphthylthio)methyl, benzyl, 4-

methoxyphenylmethyl, 4-hydroxyphenylmethyl, 4-fluorophenylmethyl or cyclohexylmethyl radicals;

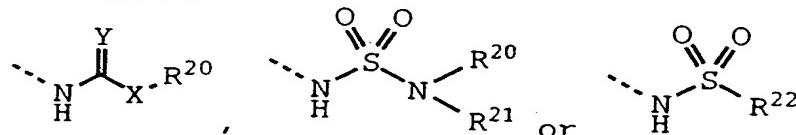
5 R³ represents propyl, isoamyl, isobutyl, butyl, cyclohexyl, cycloheptyl, cyclopentylmethyl or cyclohexylmethyl radicals; and

10 R⁴ represents benzothiazol-5-yl, benzothiazol-6-yl, benzoazol-5-yl, 2,3-dihydrobenzofuran-5-yl, benzofuran-5-yl, 1,3-benzodioxol-5-yl, 2-methyl-1,3-benzodioxol-5-yl, 2,2-dimethyl-1,3-benzodioxol-5-yl, 2,2-dideutero-1,3-benzodioxol-5-yl, 2,2-difluoro-1,3-benzodioxol-5-yl or 1,4-benzodioxan-6-yl radicals; or a radical of the formula

15



wherein Z represents O, S or NH; and R⁹ represents a radical of formula



20 wherein Y represents O, S or NH; X represents a bond, O or NR²¹;

25 R²⁰ represents hydrogen, methyl, ethyl, propyl, isopropyl, isobutyl, benzyl, 2-(1-pyrrolidinyl)ethyl, 2-(1-piperidinyl)ethyl, 2-(1-piperazinyl)ethyl, 2-(4-methylpiperazin-1-yl)ethyl, 2-(1-morpholinyl)ethyl, 2-(1-thiamorpholinyl)ethyl or 2-(N,N-dimethylamino)ethyl radicals;

30 R²¹ represents a hydrogen radical; and

R²² represents methyl radical; and

R⁵ represents an alkyl radical of 1-5 carbon atoms or phenyl substituted alkyl radical of 2-4 carbon atoms.

4. Compound of Claim 3 or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein
- 5 R¹ represents methyl or ethyl radicals;
- R² represents benzyl, 4-fluorophenylmethyl or cyclohexylmethyl radicals;
- 10 R⁴ represents benzothiazol-5-yl, benzothiazol-6-yl, 2,3-dihydrobenzofuran-5-yl, benzofuran-5-yl, 1,3-benzodioxol-5-yl, 2-methyl-1,3-benzodioxol-5-yl, 2,2-dimethyl-1,3-benzodioxol-5-yl, 2,2-dideutero-1,3-benzodioxol-5-yl, 2,2-difluoro-1,3-benzodioxol-5-yl, 1,4-benzodioxan-6-yl, 15 2-(methoxycarbonylamino)benzothiazol-6-yl or 2-(methoxycarbonylamino)benzimidazol-5-yl radicals; and
- R⁵ represents methyl, ethyl, propyl, isopropyl or 2-phenylethyl radicals.
- 20
5. Compound of Claim 1 which is
- N-[2R-hydroxy-3-[(2-methylpropyl)[(1,3-benzodioxol-5-yl)sulfonyl]amino]-1S-(phenylmethyl)propyl]-2S-methyl-3-(methylsulfonyl)propanamide;
- 25 N-[2R-hydroxy-3-[(2-methylpropyl)[(1,4-benzodioxan-6-yl)sulfonyl]amino]-1S-(phenylmethyl)propyl]-2S-methyl-3-(methylsulfonyl)propanamide;
- 30 N-[2R-hydroxy-3-[(2-methylpropyl)[(benzothiazol-6-yl)sulfonyl]amino]-1S-(phenylmethyl)propyl]-2S-methyl-3-(methylsulfonyl)propanamide;
- 35 N-[2R-hydroxy-3-[(2-methylpropyl)[(benzothiazol-5-yl)sulfonyl]amino]-1S-(phenylmethyl)propyl]-2S-methyl-3-(methylsulfonyl)propanamide; or

N-[2R-hydroxy-3-[(2-methylpropyl)[(2,3-dihydrobenzofuran-5-yl)sulfonyl]amino]-1S-(phenylmethyl)propyl]-2S-methyl-3-(methylsulfonyl)propanamide.

5

6. Composition comprising a compound of Claim 1 and a pharmaceutically acceptable carrier.

7. Method of inhibiting a retroviral protease
10 comprising administering an effective amount of a compound of Claim 1.

8. Method of treating a retroviral infection comprising administering an effective amount of a
15 composition of Claim 6.

9. Method of preventing replication of a retrovirus comprising administering an effective amount of a compound of Claim 1.
20

10. Method of preventing replication of a retrovirus *in vitro* comprising administering an effective amount of a compound of Claim 1.

25 11. Method of treating AIDS comprising administering an effective amount of a composition of Claim 6.